

WHAT IS CLAIMED IS:

1. In a computing environment, a method comprising:  
receiving a plurality of access points to distributed  
services that match specified criteria, the access points  
5 provided by a service registry;  
maintaining the plurality of access points in a cache;  
receiving a request from a program to provide an access  
point; and  
in response to the request, selecting an access point  
10 from the cache and returning data corresponding to the access  
point to the program.

2. The method of claim 1 further comprising, receiving  
the specified criteria from the program, and sending a query  
15 to the service registry based on the criteria.

3. The method of claim 2 further comprising, receiving  
the plurality of access points from the service registry in  
response to the query.

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4. The method of claim 2 wherein the service registry  
comprises a UDDI-based registry, and wherein sending the query  
to the service registry comprises sending an UDDI find  
request.

5. The method of claim 4 wherein the plurality of access points is provided by service registry in a list of URLs, and wherein returning data corresponding to the access point comprises returning data comprising a URL.

6. The method of claim 1 wherein returning data corresponding to the access point comprises returning a network address of a computer system.

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7. The method of claim 1 wherein returning data corresponding to the access point comprises returning an identifier that can be resolved by some mechanism to an application or a particular instance of an application.

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8. The method of claim 1 wherein receiving a request from a program for an access point comprises receiving a call at a defined interface.

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9. The method of claim 1 wherein selecting the access point from the cache comprises maintaining the access points in an ordering, and choosing the access point based on the ordering.

10. The method of claim 9 further comprising, basing the ordering on data received from the program.

11. The method of claim 9 further comprising, basing the 5 ordering on quality of service data.

12. The method of claim 9 wherein choosing the access point based on the ordering comprises choosing the access point that is first in the ordering of those access points 10 that have not been marked as having failed.

13. The method of claim 9 wherein choosing the access point based on the ordering comprises choosing the access point that is next in the ordering.

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14. The method of claim 1 further comprising, receiving information that a distributed service has failed, and outputting failure data in response thereto.

20 15. The method of claim 14 further comprising updating the service registry based on the failure data.

16. The method of claim 14 further comprising updating information relative to the cache based on the failure data to indicate that the service has failed.

5 17. The method of claim 14 wherein outputting failure data comprises communicating with an error handling service.

18. The method of claim 17 further comprising collecting failure information at the error handling service.

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19. The method of claim 14 wherein receiving information that a distributed service has failed comprises receiving a call at a defined interface.

15 20. A computer-readable medium having computer-executable instructions for performing the method of claim 1.

21. In a computer network in which a service registry provides access points to distributed services for use by 20 client programs, a system comprising:

a storage that maintains at least one access point provided by the service registry; and  
a manager component coupled to the client program, the manager component configured to receive a request for an

access point from the client program and to provide an access point from the storage in response to the request.

22. The system of claim 21 wherein the manager component  
5 comprises an instantiated object.

23. The system of claim 22 wherein the storage comprises a list maintained in storage allocated to the manager component object.

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24. The system of claim 21 wherein the client program hosts the manager component.

25. The system of claim 21 wherein the manager component  
15 is coupled to the client program via a defined interface that receives the request for the access point.

26. The system of claim 21 wherein the service registry comprises a UDDI-based registry.

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27. The system of claim 21 wherein the manager component receives specified criteria from the client program, sends a query to the service registry based on the criteria, and receives at least one access point in response to the query.

28. The system of claim 27 wherein the service registry comprises a UDDI-based registry, wherein the query comprises a UDDI find request, and wherein each access point received in  
5 response to the query comprises a URL string.

29. The system of claim 21 wherein a plurality of access points are in the storage, and wherein the manager component selects one from the storage in response to the request from  
10 the client program for an access point.

30. The system of claim 27 wherein the selection is based on an ordering scheme.

15 31. The system of claim 21 wherein the manager component includes a defined interface for receiving failure-related calls related to a distributed service.

32. The system of claim 31 wherein at least one failure-  
20 related call includes information that indicates the failure.

33. The system of claim 31 further comprising an error handling service, the manager component providing failure

information to the error handling service including information that indicates which service failed.

34. The system of claim 33 wherein the error handling  
5 service collects the failure information, and updates data associated with the service registry and corresponding to the service that failed.

35. In a computing environment, a system comprising:  
10 means for receiving from a service registry a plurality of access points to services;  
means for caching the plurality of access points; and  
means for providing an access point from the cache to a program in response to a request from the program for an  
15 access point to a service.

36. The method of claim 25 further comprising, means for receiving information from the program related to an error condition with respect to a service.

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37. In a computing environment, a system comprising:  
a service registry that provides access points to services in response to requests; and

a manager component comprising an object hosted by an application program, the manager component maintaining a list of access points that are obtained by sending a query to the service registry based on criteria from the application

5      program, the manager component including an interface by which the application program makes a request for an access point and the manager component returns one of the access points to the application program in response to the request.

10      38. The system of claim 37 wherein the service registry comprises a UDDI service registry, wherein the query comprises a find request, and wherein the access points comprises URLs returned from the UDDI service registry.

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